

CONSERVATION OF THE CRITICALLY ENDANGERED  
JERDON'S COURSER *RHINOPTILUS BITORQUATUS*  
IN INDIA

PRELIMINARY SURVEY REPORT

SUBMITTED TO

ANDRA PRADESH FOREST DEPARTMENT

PREPARED BY

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## **INTRODUCTION**

Jerdon's Courser (*Rhinoptilus bitorquatus*) is one of the globally threatened species and reported only from Andhra Pradesh. First described by T.C. Jerdon in 1848 'from the hilly country above the Eastern Ghats off Nellore and in Cuddapah district'. Till the year 1900, a few birds were sighted /collected in Pennar valley, Godavari River valley, and near Anantapur. For 86 years it was considered extinct, until its rediscovery on 15<sup>th</sup> January 1986 in Pennar river valley, by BNHS team. Before the rediscovery efforts taken by various ornithologists to record this elusive species were unsuccessful. This led to a belief of that it is extinct species. The place where it was rediscovered was declared as a sanctuary, by Andhra Pradesh Forest Department.

Except few sight records in recent years there is no quantitative study regarding its ecology and behaviour. It is vital to know the habitat requirement of the species to conserve it. To fulfil this lacuna, the Bombay Natural History Society and University of Reading (U.K.) joined together to carry out ecological research through a project called " Conservation of the endangered Jerdon's Courser in India", funded by Darwin Initiative for Survival of Species (U.K.).

## **OBJECTIVE OF THE PROJECT**

The duration of the project will be three years. The main objective of this study is to collect basic data pertaining to the population size and distribution of the Jerdon's Courser. Based on the results management plan will be produced and training will be provided for forest department staff researchers and to BNHS staffs for long term monitoring of this endangered species.

## **PRELIMINARY SURVEY**

### **Team Members**

The field work phase of this project initiated as a preliminary survey in Sri Lankamallaswara Wildlife Sanctuary, Cuddapah district from 20<sup>th</sup> September to 6<sup>th</sup> October 2000. The following were the members participated in this preliminary survey:

Dr. Asad R. Rahmani, Director, BNHS.

Dr. Ken Norris, Lecturer in Ecology, University of Reading (U.K.)

Dr. S. Balachandran, Scientist, BNHS

Mr. P. Jeganathan, Research Fellow

Mr. B. Ramakrishnan, Research Fellow

Mr. Mehboob Alam, Field assistant.

## **METHODOLOGY**

Night searches were carried out mainly in Reddipally forest area on foot with powerful torches and the battery operated buzzer to distract the bird. Since the bird prefers open areas, we concentrated in those kinds of habitats. We have done our night searches generally between 2100-0000 hours. We searched both inside and outside of the sanctuary in suitable habitats. We also recorded all the birds species occur in and around the study area (see Appendix 1).

The call of the Jerdon's Courser is not described properly so far. Ali & Ripley 1986 described it as a plaintive cry. Since the bird is largely nocturnal, recording the call will be essential in population estimation studies. Efforts were taken to record the call of the bird. Open areas, preferred by Jerdon's Coursers where generally coursers prefer were selected both inside and outside the sanctuary and from the late evening 4 to 5 persons spread out in random directions to cover more area and wait till to the dusk to hear the calls. Other than the calls of common birds are recorded.

Members of the courser family generally prefer open areas. So far, all the records of the Jerdon's courser's sightings are only from thorny shrub jungle with open areas. Literature review and our own observation during the survey reveals that the suitable habitat to the Jerdon's Courser found all along the foothills of the Lankamallai mountain ranges and also in some of the undulating slopes and hills. So, mapping some part of the potential habitat of Jerdon's Courser was also undertaken during the survey.

## **RESULTS**

Totally about 20 hours of night searching resulted in sighting of the Jerdon's Courser in two occasions. Both of them are from the Reddipally area. First sighting was on 21-9-2000 and the second one was on 29-9-2000. Both sightings were of solitary individual in different locations (See Table I).

We have not heard or recorded any kind of courser's calls but the effort gave us an idea about the nocturnal birds inhabiting that area. To identify the availability of the potential habitat of Jerdon's Courser, several places were

visited in the vehicle. Habitats were broadly classified as thick forest, undisturbed open shrub forest, disturbed open shrub forest and farmland. The suitable habitats were marked in the GPS (Global Positioning System) for doing further works.

## **FUTURE PLAN**

- The intensive fieldwork will be starts from November 2000.
- The study is going to be strictly non-invasive. So that thorough search will be carryout with torch lights and night vision scope in the potential Jerdon's Courser habitats.
- Places like Turupukonda foothills, Palakonda-Seshalam valley, Seshachalam foothills in Cuddapah district, and Vellikonda scrub forests, Vellikonda valleys in Nellore district which are having valid sight records of Jerdon's courser will be searched intensively in the coming months.
- In addition to that places which have unconfirmed reports of the bird will also be searched.
- Simultaneously mapping the potential habitat of the Jerdon's Courser also be carried out.
- Vegetation structure of the place in which the birds were sighted will be analyzed quantitatively.

**TABLE-I**

<b>SL.NO</b>	<b>PARAMETERS</b>	<b>BIRD NO. 1</b>	<b>BIRD NO. 2</b>
1.	Date	21 - 9 - 2000	26 - 9 - 2000
2.	Time	2340 hours	2230 hours
3.	Location	N14° 34.905' E079° 01.078'	N14°34.839' E079° 01. 216'
4.	Weather	Clear sky	Clear sky
5.	Number of Individual	One	One
6.	Activity of the bird while observing	Frozen initially then took off.	Run for a few feet and then took off.
7.	Vegetation type (for 3m radius in the place where birds are sighted)	Barren land with patches of small grasses c.1inch height and bushes c.2m height.	Stones present and bushes from 1 to 3 m in height
8.	Distance from the observer	less than 5 meters	10 - 12 meters

## APPENDIX 1

### LIST OF BIRDS SIGHTED IN AND AROUND SRI LANKAMALESWARA WILDLIFE SANCTUARY FROM SEPTEMBER- OCTOBER 2000

SL.NO.	COMMON NAME	SCIENTIFIC NAME
1.	LITTLE GREBE	<i>Trachybaptus ruficollis</i>
2.	POND HERON	<i>Ardeola grayii</i>
3.	CATTLE EGRET	<i>Bubulcus ibis</i>
4.	LITTLE EGRET	<i>Egretta garzetta</i>
5.	BLACK WINGED KITE	<i>Elanus caeruleus</i>
6.	PARIAH KITE	<i>Milvus migrans</i>
7.	SHIKRA	<i>Accipiter badius</i>
8.	WHITE-EYED BUZZARD-EAGLE	<i>Butastur teesa</i>
9.	SHORT-TOED EAGLE	<i>Circaetus gallicus</i>
10.	GREY PARTRIDGE	<i>Francolinus pondicerianus</i>
11.	ROCK BUSH QUAIL	<i>Peridicula argoondah</i>
12.	GREY JUNGLE FOWL	<i>Gallus sonneratii</i>
13.	WHITE BREASTED WATER HEN	<i>Amaurornis phoenicurus</i>
14.	BLACK WINGED STILT	<i>Himantopus himantopus</i>
15.	STONE CURLEW	<i>Burhinus oedicephalus</i>
16.	JERDON'S COURIER	<i>Cursorius bitorquatus</i>
17.	RED WATTLED LAPWING	<i>Vanellus indicus</i>
18.	YELLOW WATTLED LAPWING	<i>Vanellus malabaricus</i>
19.	COMMON SANDPIPER	<i>Tringa hypoleucos</i>
20.	RING DOVE	<i>Streptopelia decaocto</i>
21.	LITTLE BROWN DOVE	<i>Streptopelia senegalensis</i>
22.	ROSE RINGED PARAKEET	<i>Psittacula krameri</i>
23.	BLOSSOM HEADED PARAKEET	<i>Psittacula cyanocephala</i>
24.	INDIAN PLANITIVE CUCKOO	<i>Cacomantis passerinus</i>
25.	KOEL	<i>Eudynamis scolopacea</i>
26.	SMALL GREEN BILLED MALKOHA	<i>Rhopodytes viridirostris</i>
27.	CROW-PHEASANT	<i>Centropus sinensis</i>
28.	INDIAN GREAT HORNED OWL	<i>Bubo bubo</i>
29.	SPOTTED OWLET	<i>Athene brama</i>
30.	JUNGLE NIGHTJAR	<i>Caprimulgus indicus</i>
31.	COMMON INDIAN NIGHTJAR	<i>Caprimulgus asiaticus</i>
32.	LONGTAILED NIGHTJAR	<i>Caprimulgus macrurus</i>
33.	BLUE TAILED BEE-EATER	<i>Merops philippinus</i>
34.	SMALL GREEN BEE-EATER	<i>Merops orientalis</i>
35.	BLUE JAY	<i>Coracias beghalensis</i>
36.	HOOPOE	<i>Upupa epops</i>
37.	INDIAN PITTA	<i>Pitta brachyura</i>
38.	REDWINGED BUSH LARK	<i>Mirafra erythroptera</i>
39.	BLACK BELLIED FINCH- LARK	<i>Eremopterix grisea</i>
40.	RUFIOUS TAILED FINCH-LARK	<i>Ammomanes phoenicurus</i>
41.	RED RUMPED SWALLOW	<i>Hirundo duarica</i>
42.	BAY BACKED SHRIKE	<i>Lanius vittatus</i>
43.	BROWN SHRIKE	<i>Lanius cristatus</i>
44.	BLACK DRONGO	<i>Dicrurus adsimilis</i>
45.	BLACK HEADED MYNA	<i>Sturnus pagodarum</i>
46.	INDIAN MYNA	<i>Acridotheres tristis</i>
47.	TREE PIE	<i>Dendrocitta vagabunda</i>

48.	HOUSE CROW	<i>Corvus splendens</i>
49.	JUNGLE CROW	<i>Corvus macrorhynchos</i>
50.	BLACK HEADED CUCKOO-SHRIKE	<i>Coracina melanoptera</i>
51.	SMALL MINIVET	<i>Pericrocotus cinnamomeus</i>
52.	IORA	<i>Aegithina tiphia</i>
53.	RED VENTED BULBUL	<i>Pycnonotus cafer</i>
54.	WHITE BROWED BULBUL	<i>Pycnonotus luteolus</i>
55.	SPOTTED BABBLER	<i>Pellornium ruficeps</i>
56.	RUFIOUS BELLIED BABBLER	<i>Dumetia hyperythra</i>
57.	COMMON BABBLER	<i>Turdoides caudatus</i>
58.	LARGE GREY BABBLER	<i>Turdoides malcolmi</i>
59.	WHITE HEADED BABBLER	<i>Turdoides affinis</i>
60.	JUNGLE BABBLER	<i>Turdoides striatus</i>
61.	BROWN FLYCATCHER	<i>Muscicapa latirostris</i>
62.	PARADISE FLYCATCHER	<i>Terpsiphone paradisi</i>
63.	WHITE BROWED FANTAIL FLYCATCHER	<i>Rhipidura aureola</i>
64.	ASHY WREN-WARBLER	<i>Prinia socialis</i>
65.	JUNGLE WREN-WARBLER	<i>Prinia sylvatica</i>
66.	TAILOR BIRD	<i>Orthotomus sutorius</i>
67.	LESSER WHITE THROAT	<i>Sylvia curruca</i>
68.	MAGPIE – ROBIN	<i>Copsychus saularis</i>
69.	INDIAN ROBIN	<i>Saxicoloides fulicata</i>
70.	TICKELL'S FLOWERPECKER	<i>Dicaeum erythrorhynchos</i>
71.	FOREST WAGTAIL	<i>Montacilla indica</i>
72.	LARGE PIED WAGTAIL	<i>Montacilla maderaspatensis</i>
73.	PURPLE RUMPED SUNBIRD	<i>Nectarinia zeylonica</i>
74.	PURPLE SUNBIRD	<i>Nectarinia asiatica</i>
75.	HOUSE SPARROW	<i>Passer domesticus</i>
76.	BAYA WEAVER BIRD	<i>Ploceus philippinus</i>
77.	WHITE THROATED MUNIA	<i>Lonchura malabarica</i>